Technical Report No. 64.194.12.0586.01

Dated 2012-07-02

Applicant	:	ADEO Services – Guangzhou Buying Office Unit D & E, 27/F., Chung Kiu Building, 76 Middle Xianlie Road, Guangzhou 510070, P.R. China
Attn	:	Mr. Jacky Jiang
Supplier	:	Shenzhen Eastfield Lighting Co., Ltd.
Manufacturing place	:	Same as supplier.
License holder	:	Same as supplier.
Test subject	:	LED luminaire (LED RIBBON KIT)
Model/Type	:	K691B-KIT-WH
Order No.	:	S2009051296, S2009051297
Test Specifications	:	EN 60598-1/A11:2009, EN 60598-2-4:1997 EN 62031:2008
Sample size	:	1 Pc
Documents	:	2 pages of TÜVPS CE certificate were provided: N8 11 09 77243 011 5 pages CDF issued by TÜVPS were provided: 64.140.11.01942.01 130 pages of TÜVPS test report were provided: 64.140.11.01942.01
Purpose of examination	:	Construction check as per EN 60598-2-4:1997, clause 4.5, 4.6, 4.7, 4.8, 4.10, 4.11, 4.14 EN 60598-1/A11:2009, clause 0, 3, 4, 5, 7, 8, 10, 11 For EN62031:2008, due to certified LED module used, only check CDF. See Table 1, Table 2 and Photographic Documentation
Results	:	**Pass**

This technical report may only be quoted in full. Any use for advertising purposes must be granted in writing. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production.

1 Description of the test subject

Rated Voltage	:	220-240V, 50/60Hz(LED Driver), 12VDC (LED ribbon)
Rated Power of LED ribbon	:	2.4W/M Max. 8m for single output, Max 12 m for total of two ouputs.
Protection Class	:	II (LED Driver), III (LED Ribbon)
Protection Against Moisture	:	IP20
Classification of radiation	:	Exempt group

2 Order

2.1 Date of Purchase Order, Customer's Reference

2012-06-27

2.2 Receipt of Test Sample, Location

2012-06-27(on-site test)

2.3 Date of Testing

2012-06-27 to 2012-07-02

2.4 Location of Testing

TUV SUD Guangzhou Branch

2.5 Points of Non-compliance or Exceptions of the Test Procedure

None.

3 Test result

Details see table 1 / 2

4 Deviation

None.

5 Remark

5.1 The English user manual was checked only.

5.2 The actual used BAOHING H03VVH2-F power cable is not listed in CDF.

6 Label

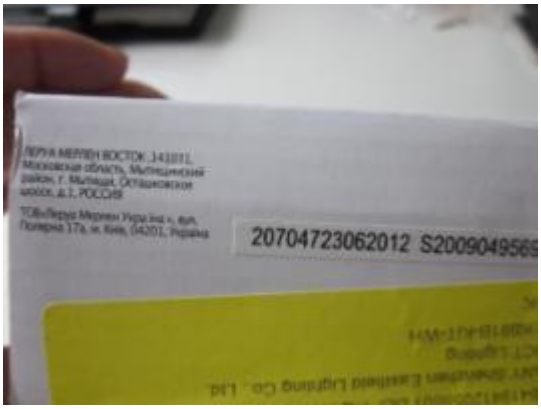
Label:

LED driver Rating label

LED Ribbon rating label

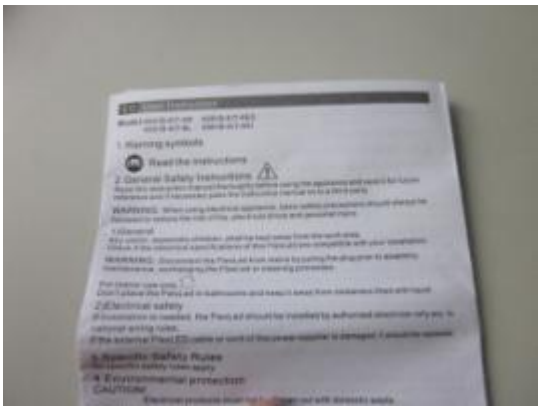
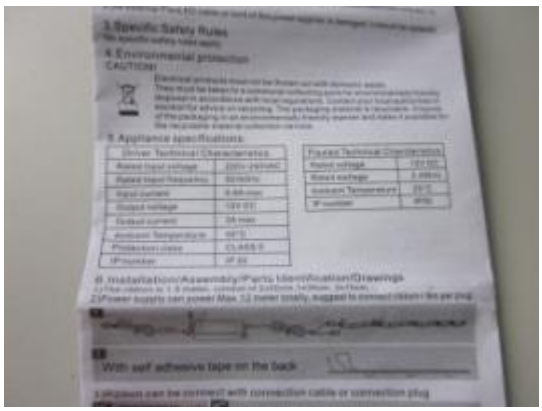
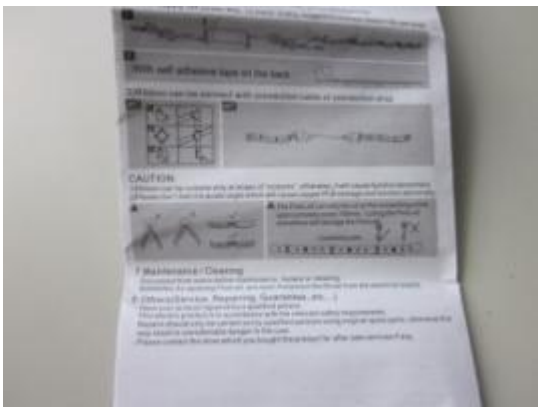
7 Photo documentation

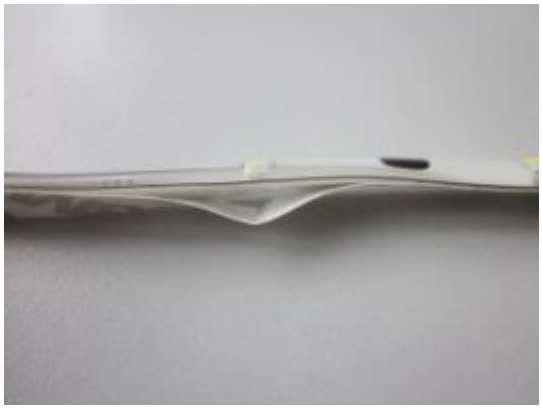
ADEO Services – Rue Sadi Carnot – CS 00001
59790 RONCHIN – FRANCE
ADEO-MAYA YAPI MARKETLER A.S Tanburi Ali Efendi Cad. Bade sok.
No:6 – 34440 Etiler-Besiktas. Istanbul – TURKEY
K6918-KIT-WH
Made in P.R.C.
3 276004 093141

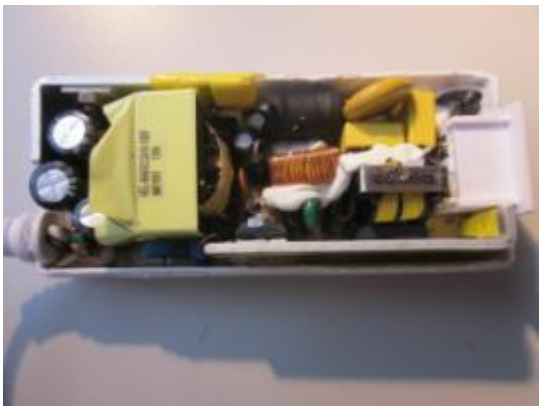


For LED use only
EQUIV.
SELV
tc 80°C
CAUTION
Indoor use only
Dangerous voltage inside,do not
open
Made in P.R.C.
1221

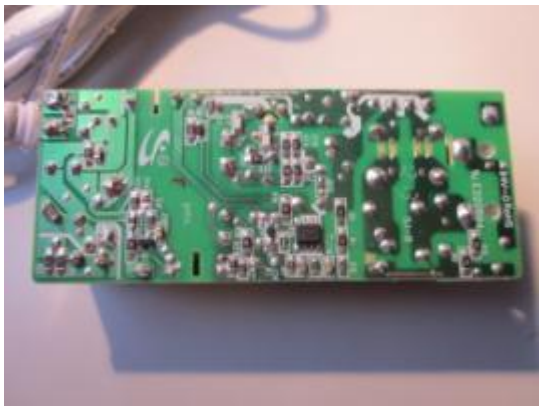
SWITCHING ADAPTER
MODEL: K691B-Driver-2
INPUT: 220-240V~50/60Hz
0.8A max.
OUTPUT: 12V ⎓ Max3.0A 36W
ta 40°C tc 80°C
For LED use only

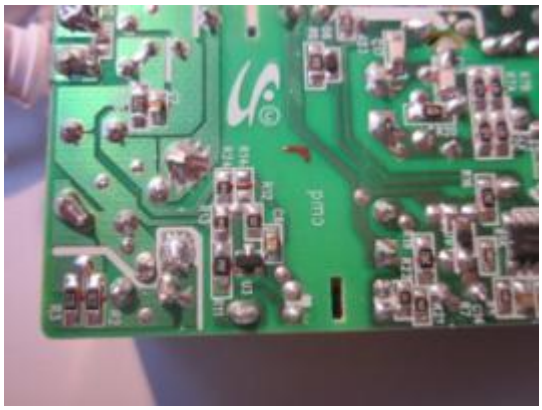


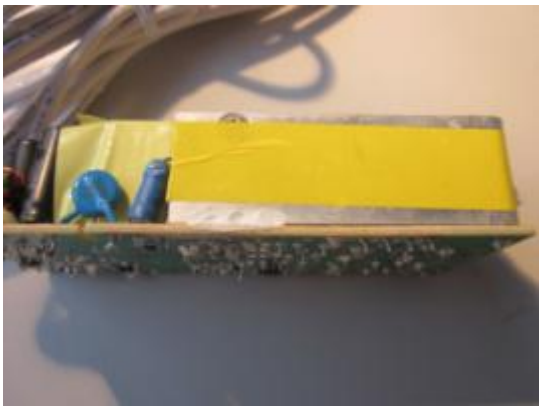


HEL-888/EC2819-1203
0601003 1209

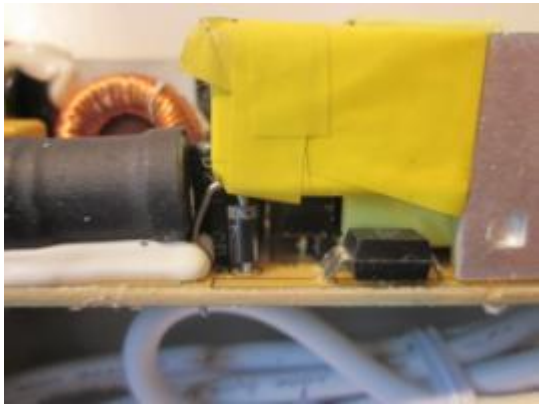


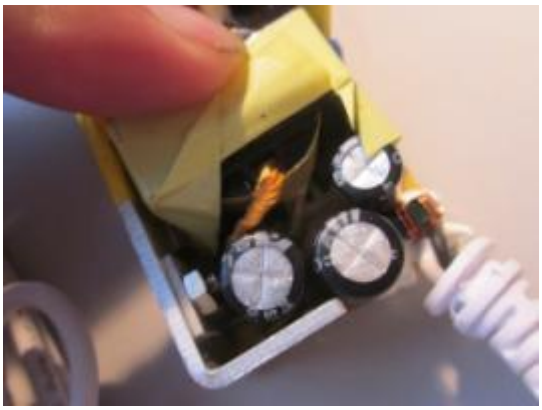
94V-0 RoHS
E320884

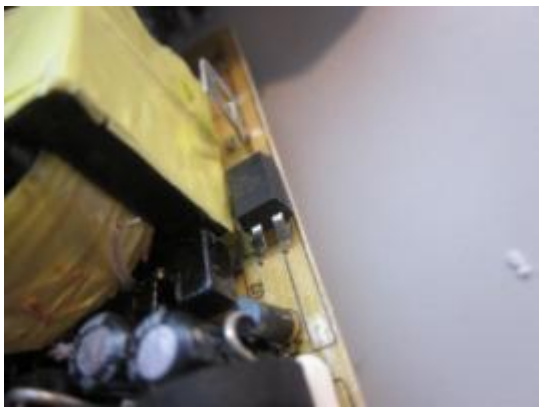


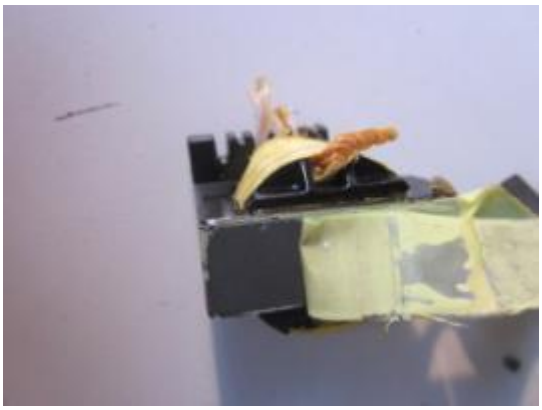


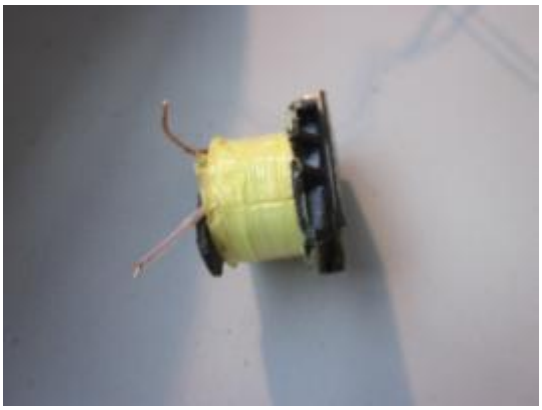
TVR
14471

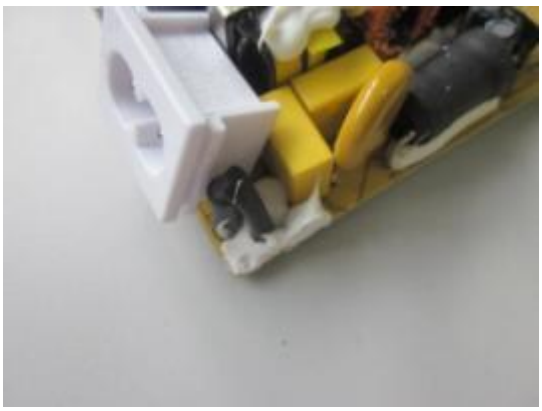












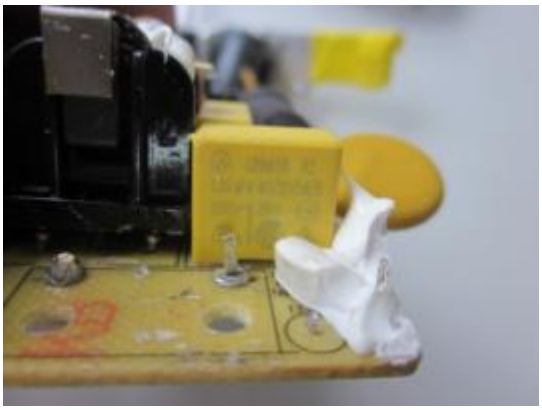


Table 1: Result by model

Model No.	Testing item	Result
K691B-KIT-WH	Construction check	Pass

Table 2: Result by Safety Aspects

Standard: EN 60598-2-4:1997			
Selected Sub-clauses from	**Check points**	**Brief Description / Remark**	**Pass / Fail**
Clause 3.2 - 3.4 (4.5)	Marking, Instruction Manual *(Refer to note 2)*	XXXXXXXXXXXXXXXXX	Pass
Clause 4.7.1, 4.8, 4.11.1, 4.13.1 (4.6)	Construction	XXXXXXXXXXXXXXXXX	Pass
Clause 7 (4.8)	Provision for earthing	XXXXXXXXXXXXXXXXX	N/A
Clause 5.3.1, 5.3.2 (4.10)	External and Internal wiring	XXXXXXXXXXXXXXXXX	Pass
Clause 10.2.2 (4.14)	Electric strength test	XXXXXXXXXXXXXXXXX	Pass
Clause 11 (4.7)	Creepage distance and Clearances	XXXXXXXXXXXXXXXXX	Pass
Clause 8.2.1 (4.11)	Protection against electric shock	XXXXXXXXXXXXXXXXX	Pass
(Clause 0)	Check of critical components against CDF	XXXXXXXXXXXXXXXXX	Pass

Note 1: Clause numbers between brackets refer to clauses in EN 60598-2-4:1997.

Note 2: Only safety warnings required by the specified standards were verified, all non-safety related aspects of the manual and packaging were not considered in this investigation.

***

Jiangsu TÜV Product Service Ltd. Guangzhou Branch
TÜV SÜD Group

Engineer: Jason Yang

Technical Report checked: Cary Li

Subsidiary of TÜV SUD Product Service GmbH, Riderstrasse 65, 80339 Munich, Germany

Jiangsu TUV Product Service Ltd
Shenzhen Branch
TUV SUD Group
6 Floor, H Hall, Century Craftwork
Culture Square, No. 4001, Fuqiang
Road, Futian District,
Shenzhen 518048,
P. R. China
Tel: +755-88286998
Fax: +755-88285299
Web: http://www.tuv-sud.cn

To: Shenzhen Eastfield Lighting Co., Ltd.
West of 2/4F and 3/5F in No. A Building and 3/4/5F in No. F Building, Xinhui Industrial Zone, No. 3 Tangtou Industrial Area, Shiyan Street, 518108 Baoan, Shenzhen, Guangdong Province, PEOPLE'S REPUBLIC OF CHINA

Attention: **Ms. Chen Jie**

cc:

From: TÜV SÜD China, Shenzhen Branch.

Date: **December 14, 2011**

Total Page (Cover Included): **1**

Your Reference: K606B KIT 1; K606B KIT 2; K606B KIT 3; K606B KIT 4; K606B KIT 5; K606B KIT 6; K605A KIT 1; K605A KIT 2; K605A KIT 3; K687 KIT 1; K687 KIT 2; K687 KIT 3; K687 KIT 4; K687 KIT 5; K687 KIT 6

Our Reference: **68.140.11.154.02**

Confirmation for Use of Alternative Components

Product	Model	License No.	Report No.
LED Recessed Light	K606B KIT 1; K606B KIT 2; K606B KIT 3; K606B KIT 4; K606B KIT 5; K606B KIT 6; K605A KIT 1; K605A KIT 2; K605A KIT 3; K687 KIT 1; K687 KIT 2; K687 KIT 3; K687 KIT 4; K687 KIT 5; K687 KIT 6	N8 11 11 77243 015	681401115401

Hereby we would like to confirm the following alternate component is suitable for use in the above mentioned product:

Object/part No.	Manufacturer/ trademark	Type/ model	Technical data	Standard (Edition / year)	Mark(s) of conformity[1])
Wire for LED module	HongYi Electronics (Shenzhen) Co Ltd	2468	80°C, 300V, 22AWG	EN 60598-2-2 EN 60598-1	Tested with appliance

Please attach this letter to the corresponding CDF.

If you have further questions, please feel free to contact us.

Yours sincerely,

JIANGSU TÜV PRODUCT SERVICE LTD. TÜV SUD * SHEN ZHEN *

Taylor Yao
Project Manager

Technical Report No. 68.140.11.154.02

Dated 2011-12-14

Client	:	Shenzhen Eastfield Lighting Co., Ltd. West of 2/4F and 3/5F in No. A Building and 3/4/5F in No. F Building, Xinhui Industrial Zone, No. 3 Tangtou Industrial Area, Shiyan Street, 518108 Baoan, Shenzhen, Guangdong Province, PEOPLE'S REPUBLIC OF CHINA
Contact person	:	Ms. Chen Jie
Manufacturing place	:	Shenzhen Eastfield Lighting Co., Ltd. West of 2/4F and 3/5F in No. A Building and 3/4/5F in No. F Building, Xinhui Industrial Zone, No. 3 Tangtou Industrial Area, Shiyan Street, 518108 Baoan, Shenzhen, Guangdong Province, PEOPLE'S REPUBLIC OF CHINA
Test subject	:	Product: LED Light Type : K606B KIT 1; K606B KIT 2; K606B KIT 3; K606B KIT 4; K606B KIT 5; K606B KIT 6; K605A KIT 1; K605A KIT 2; K605A KIT 3; K687 KIT 1; K687 KIT 2; K687 KIT 3; K687 KIT 4; K687 KIT 5; K687 KIT 6
Test Specification	:	EN 60598-2-2:1996+A1:1997 EN 60598-1:2008+A11:2009 EN 62031:2008 EN 62471:2008
Purpose of examination	:	Alternative component.
Test result	:	The test results show that the presented products are in compliance with the specified requirement.

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1 Description of the test subject

1.1 Function

LED light for indoor use only
Each model for the products includes 2 parts, an independent LED driver and independent LED modules. LED driver for all models are same, its model no. is K609-3509-2.

1.2 Consideration of the foreseeable misuse

☐ Not applicable
☑ Covered through the applied standard
☐ Covered by the following comment
☐ Covered by attached risk analysis

1.3 Technical Data

- Protection Class	Class II
- Degree of protection	IP20
- Supply connection	Supply cord fitted with a plug
- Rated input oltage	100-240V~; 50/60Hz
- Rated input power	2.5W [K606B KIT 1 and K687 KIT 1]; 4.0W [K606B KIT 2 and K687 KIT 2]; 5.0W [K606B KIT 3, K605A KIT1 and K687 KIT 3]; 6.0W [K606B KIT 4 and K687 KIT 4]; 7.5W [K606B KIT 5 and K687 KIT 5]; 9.0W [K606B KIT 6, K605A KIT 2 and K687 KIT 6]; 12.5W [K605A KIT 3]
- Rated max. ambient temperature	40°C

2 Order

2.1 Date of Purchase Order, Customer's Reference

2011-09-19

2.2 Receipt of Test Sample, Location

1pc sample was received on 2011-12-13; TEC Department, Shenzhen

2.3 Date of Testing

2011-12-13 to 2011-12-14

2.4 Location of Testing

TEC Department, Shenzhen

2.5 Points of Non-compliance or Exceptions of the Test Procedure

Nil

***

3 Test results

Positive Test Results

The following tests specifications are met:

- Electrical safety
  - EN 60598-2-2:1996+A1:1997
  - EN 60598-1:2008+A11:2009
  - EN 62031:2008
- Photobiological safety
  - EN 62471:2008

4 Remark

4.1 This technical report is based on the previous technical report no. 68.140.11.154.01 for adding below alternative component.

Object/part No.	Manufacturer/ trademark	Type/ model	Technical data	Standard (Edition / year)	Mark(s) of conformity[1])
Wire for LED module	HongYi Electronics (Shenzhen) Co Ltd	2468	80°C, 300V, 22AWG	EN 60598-2-2 EN60598-1	Tested with appliance

5 Documentation

Nil

6 Summary

The test specifications are met.

***

Jiangsu TÜV Product Service Ltd. Shenzhen Branch

Engineer: Jason Yan

Jason Yan

Project Engineer

Technical Report checked:

Taylor Yao

Project Manager

Aufbauübersicht für Elektrogeräte und Maschinen
Data form for electrical equipment and machinery

Auftraggeber / Applicant:	Shenzhen Eastfield Lighting Co., Ltd. West of 2/4F and 3/5F in No. A Building, and 3/4/5F in No. F Building, Xinhui Industrial Zone, No. 3 Tangtou Industrial Area, Shiyan street, Baoan, Shenzhen, Guangdong Province, China
Fertigungsstätte / Production facility:	Shenzhen Eastfield Lighting Co., Ltd. West of 2/4F and 3/5F in No. A Building, and 3/4/5F in No. F Building, Xinhui Industrial Zone, No. 3 Tangtou Industrial Area, Shiyan street, Baoan, Shenzhen, Guangdong Province, China
Geräteart / Type of equipment:	Internal lights (LED RIBBON KIT)
Typenbezeichnung / Type/model:	K691B-kit-wh, 615206-52-R, K691B-kit-bl, 615209-52-R, K691B-kit-red, 615207-52-R, K691B-kit-gr, 615208-52-R, K691B-kit-cw-3m, 615210-52-R, K691B-kit-rgb, 615302-52-R
Seriennr. / Serial no.:	N/A
Nennspannung/Frequenz / Rated voltage/frequency:	For LED driver: Input: 220-240V~, 50/60Hz Output:12VDC for each output connector For LED tube: input 12VDC
Nennaufnahme/Nennstrom / Rated input power/current:	LED driver: Input: max. 0.8A; Output: total max. 3A for two output connectors LED tube: For model K691B-kit-rgb, 615302-52-R total max. 5m, 36W for two ourput connectors; For other mdoels total max.12m, 36W for two output connectors; max.8m, 19,2W for single output connector
Anschlußdaten-Pneumatik / Connection to pneumatic power:	N/A
Anschlußdaten-Wasser / Connection to waterinstallation:	N/A
Lärmemission / noise emmission (dB A):	N/A

Ausführung / Construction:	Ortsfest	Stationary	☐
	Ortsveränderlich	Portable	☒
	Handgerät	Hand-held	☐
	Einbaugerät	Open-frame	☐
Schutzklasse / Protection class: Schutzklasse I:	Schutzleiteranschluß	PE-connection	☐
Schutzklasse II:	Schutzisoliert	Double insulation	☒
Schutzklasse III:	Schutzkleinspannung/ interne Stromversorgung	SELV/internally powered	☐
Schutzart / Degree of protection against liquids:		IP20	☒
Anschlußart / Supply connection:	Feste Anschlußleitung	Non detachable cord	☐
	Fester Anschluß	Permanent connection	☐
	Gerätesteckvorrichtung	Appliance inlet	☒
Netzbetriebsart / Rated operation:	Dauerbetrieb	Continuous operation	☒
	Aussetzbetrieb	Intermittent operation	☐
	Kurzzeitbetrieb	Short time operation	☐

Material: a)Gehäuse / Enclousure Metal and glass
b) Leiterplatten / p.c.b. N/A.

Zusätzliche Angaben für Laser, Klassifizierung nach EN 60825
Additional information for Laser equipment, classification according to EN 60825

Klasse / Class: N/A
Wellenlänge / Wavelength: N/A
Pulsdauer / Pulse duration: N/A

Prüfbericht Nr. / Test Report No.: 64.140.11.01942.01	Ort / place: Shenzhen	Datum / date: 2011-08-29
Projektleiter / Project engineer:Candy Li	Stempel und Unterschrift / Seal and signature	

Aufbauübersicht für Elektrogeräte und Maschinen
Data form for electrical equipment and machinery

Sicherheitsrelevante Bauteile: (Schalter, Temperaturregler, Heizkörper, Stecker, Fassungen, Leitungen, Kondensatoren, Motoren und sonstige Wicklungen z.B. Transformatoren, Magnetspulen)
(Not-Aus Geräte, 2-Handsteuerungen, Verriegelungsschalter, Sicherheits-Lichtschranken, Sicherheitsventile, Programmierbare Steuerungen-SPS, hydraulische Steuerungen, pneumatische Steuerungen .....)
Safety relevant components: (switch, temperature regulator, heating element, plug, socket, wiring, capacitor, motors and other components with windings e.g. transformers, coils)
(emergency off devices, 2-hand-control-devices, interlock switches, safety light barriers, safety valves, programmable electronic controllers -PLC, hydraulic controllers, pneumatic controllers .....)

Bauteil / Kind of component	Hersteller / Manufacturer	Angaben über Typ, Stromstärke, Leistung, Transformatorspezifikationsnummer, Isolationsklasse / Information about type, current, power, transformer specitication number, insulating class	Standard	Prüfzeichen von Test mark from (VDE, BSI, UL etc.)
PCB of LED tube	CHUAN LIAN ELECTRONIC CO.,LTD	Thickness: 1 Ounce (35μm) Material: rolled copper foil	-	Test with appliance
LED	HONGLI TRONIC CO.,LTD	For model K691B-kit-red, 615207-52-R Type: HL-A-3528S11FC, red, 625nm, IF=20mA	EN 62471	Test with appliance
		For model K691B-kit-bl, 615209-52-R Type: HL-A-3528H203BC, blue, 464-474nm, IF=20mA	EN 62471	Test with appliance
		For model K691B-kit-gr, 615208-52-R Type: HL-A-3528U51GC, green, 512-522nm, IF=20mA	EN 62471	Test with appliance
		For model K691B-kit-wh, 615206-52-R, K691B-kit-cw-3m, 615210-52-R Type: HL-A-3528H344W-S2-13, white, 4500K, IF=20mA	EN 62471	Test with appliance
		For model K691B-kit-rgb, 615302-52-R Type: HL-AF-5060H271BU46FU79GC-B, red:618-628nm, green:515-525nm, blue:464-474nm, IF=20mA.	EN 62471	Test with appliance
Connector pin	DONGGUAN CITY YULIANG ELECTRONICS CO., LTD	Type:: PIN HEADER Rated Current: 3AMP Contact Resistance: Max 10mΩ Dielectric Strength: min 1000v RMS Insulation Material: White glass filled Polyester PBT-GF30-FR conforming with UL94V-0 Sleeve: Brass CuZN36Pb3(C36000) Forces: Insertion 2N Withdrawal 1N	EN61984 EN60999-1 EN61000-6-2 EN61000-6-4	Test with appliance
IR CONTROLLER for model K691B-kit-rgb, 615302-52-R	Shenzhen Eastfield Lighting Co., Ltd.	Type: K691B-RECEIVER, 98003-52-R. 12VDC, max.3A	EN 61058	Test with appliance

Aufbauübersicht für Elektrogeräte und Maschinen
Data form for electrical equipment and machinery

Bauteil / Kind of component	Hersteller / Manufacturer	Angaben über Typ, Stromstärke, Leistung, Transformatorspezifikationsnummer, Isolationsklasse / Information about type, current, power, transformer specitication number, insulating class	Standard	Prüfzeichen von Test mark from (VDE, BSI, UL etc.)
LED driver	Shenzhen Eastfield Lighting Co., Ltd.	For other models Type: K691B-driver-2, 97903-52-R. Input: 220-240V~, 50/60Hz,0.8A max output: 12VDC max.3A 36W ta:40°C tc:80°C	EN 61347-1 EN 61347-2-13	Test with appliar
		For model K691B-kit-rgb, 615302-52-R Type: 98005-52-R. Input: 220-240V~, 50/60Hz,0.8A max output: 12VDC max.3A 36W ta:40°C tc:80°C	EN 61347-1 EN 61347-2-13	Test with appliance
Components for IR CONTROLLER K691B-RECEIVER, 98003-52-R				
Enclosure	CHI MEI CORPORATION	Type: ABS, POLYLAC® PA-765A	-	Test with appliance
PCB	SHENZHEN JINSHENGDA ELECTRONIC TECHNOLOGY CO LTD	Type: JSD-2, thickness 1.6mm, 130°C, UL94V-0	-	UL and Test with appliance
Output wire	ZHONGSHAN DONGFENG ZHOUSHISHENLONG ELECTRONIC WIRE CO LTD	4 Pins, 1 wire for common anode, 0.5 mm^2 ; 3 wires for cathod, min 0.2 mm^2 Conductor Material: Copper Wire Jacket Material: PVC Jacket Thickness: 1.5mm Dielectric Strength: 300V	-	Test with appliance
Inlet	LEQING XINWAN ELECTRONIC CO LTD	Rated Current: 3 A Actuating Force 3～20N Contact Resistance: ≤0.03Ω Dielectric Strength: AC500 V (50Hz)/min Work Temperature: -30～70°C Insulation Resistance ≥100MΩ Insulation Material: ABS	-	Test with appliance
Conmonents for LED driver K691B-Driver-2, 97903-52-R and 98005-52-R				
Plug	Shen Zhen Wang Jing Electronics Co., Ltd.	Type: WJY-201; 250VAC, 2.5A	DIN VDE 0620	VDE
Flexible cable	Harvest Electric Wire and Products Mfg. Co. Ltd.	Type: H03VVH2-F; 2x0.75mm^2	DIN VDE 0281	VDE
Flexible-cord switch	OPENWISE INDUSTRIAL LIMITED	Type: 304; 250V,2[2]A, 1E4, T55, IP30	EN 61058	SEMKO
Appliance couplers	Shen Zhen Wang Jing Electronics Co., Ltd.	Type: WJC-201; 250VAC, 2.5A	DIN EN 60320	VDE
Appliance inlet	Zhe Jiang Bei Er Jia Electronic Co., Ltd.	Type: ST-A03-005; 2.5A, 250Vac	DIN VDE 60320	VDE
	Zhejiang LECI Electronics Co., Ltd Bldg. A, Sidu Industrial District	Type: DB-8 series; 2.5A, 250Vac		VDE
Enclosure	SABIC INNOVATIVE PLASTICS US L L C	Type: 940(f1); V-0, 120°C, PC, 1.5 mm thickness	UL 746	UL
PCB	HUIZHOU SHUNJIA ELECTRONICS CO LTD	Type: SJ-B; V-0, 130°C	UL 796	UL
	DONGGUAN HE TONG ELECTRONICS CO LTD	Type: CEM1; V-0, 130°C		UL
	DONGGUAN CITY HUAXIA PCB MFG CO LTD	Type: HX-2; V-0, 130°C		UL

Prüfbericht Nr. / Test Report No.: 64.140.11.01942.01 | Ort / place: Shenzhen | Datum / date: 2011-08-29

Projektleiter / Project engineer:Candy Li | Stempel und Unterschrift / Seal and signature

Aufbauübersicht für Elektrogeräte und Maschinen
Data form for electrical equipment and machinery

Bauteil / Kind of component	Hersteller / Manufacturer	Angaben über Typ, Stromstärke, Leistung, Transformatorspezifikationsnummer, Isolationsklasse / Information about type, current, power, transformer specitication number, insulating class	Standard	Prüfzeichen von Test mark from (VDE, BSI, UL etc.)
Fuse	Shenzhen Lanson Electronics Co. Ltd.	Type: 3K T3, 15A, 250V T3.15A, AC250V. Sub-miniature type	DIN EN 60127	VDE
	Honghu Bluelight Electronic Co., Ltd.	Type: L3T; T3.15A, AC250V, Sub-miniature type		VDE
X2-Capacitor	Shenzhen Jinghao Capacitor Co., Ltd.	Type: CBB62B; 0.15µF, 280Vac, 40/110/56	DIN EN60384	VDE
Y1-Capacitor	Dongguan Easy-gather Electronic Co., Ltd.	Type: DCF; 400Vac, 2200pF, 25/125/21/C	DIN EN60384	VDE
	Shantou High-New Technology Dev. Zone Songtian Enterprise Co., Ltd.	Type: CD-Series; Min. 250Vac, max. 2200pF, 25/125/21/C		VDE
Optocoupler	Everlight Electronics Co., Ltd.	Type: EL 817V; 55/110/21	DIN EN 60747	VDE
Output wire	ZI LI ELECTRONIC CO LTD	Type: 1185, 2464, 2468; 18AWG, 80°C	UL 758	UL
	SHENZHEN SHI YIHUAXING ELECTRON CO LTD	Type: 1185, 2464, 2468; 18AWG, 80°C	UL 758	UL
	JIA DA TAI WIRE & CABLE SHEN ZHEN CO LTD	Type: 1185, 2464, 2468; 18AWG, 80°C	UL 758	UL
Varistor (MOV1)	Thinking Electronic Industrial Co., Ltd.	Type: TVR07471K , TVR07561K, TVR10561K, TVR14471K;;40/85/56	IEC 61051	VDE
Varistor(MOV2)	Xi'An Xiwuer Electronics & Information Co., Ltd	Type: MYG3-7K300; 40/085/04	IEC 61051	VDE
Heat shrinkable tube	SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO LTD	Type: RSFR; 125°C, VW-1, 600Vac,	UL 224	UL
	CHANGYUAN ELECTRONICS (SHENZHEN) CO LTD	Type: Changbao 102; 125°C, VW-1, 600Vac,	UL 224	UL
	DONGGUAN SALIPT CO LTD	Type: SALIPT S-901-300; 125°C, VW-1, 300V Type: SALIPT S-901-600; 125°C, VW-1, 600V	UL 224	UL
Transformer (T1)	Shenzhen Honor Electronic Co., Ltd.	Type: HEL-B88/EC2819-1203 N3(pin 5-6): Ø 0.2mm x 2P, 9 turns; N6(pin B-A): reinforced insulation windingwire: Ø 0.32mm x 2P; 8 turns; N2(pin 1-3):wire: Ø 0.5mm x 1P; 16 turns; N5(pin B-A): reinforced insulation windingwire: Ø 0.32mm x 2P; 8 turns; N4(pin B-A): reinforced insulation windingwire: Ø 0.32mm x 2P; 8 turns; N7(pin 6-NC): Ø 0.025mm x 8.5mm; 1 turn, L=52mm; N1(pin 2-1): magnet wire: Ø 0.5mm x 1P; 35 turns;	-	Tested with appliance
Bobbin	CHANG CHUN PLASTICS CO LTD	Type: T375J; V-0, 150°C,	UL 94	UL
Triple insulate wire (for sec. winding of T1)	TA YA Electric Wire & Cable Co., Ltd.	Type: TILW-B; 130 °C, Class B	DIN EN 60950	VDE

Aufbauübersicht für Elektrogeräte und Maschinen
Data form for electrical equipment and machinery

Bauteil / Kind of component	Hersteller / Manufacturer	Angaben über Typ, Stromstärke, Leistung, Transformatorspezifikationsnummer, Isolationsklasse / Information about type, current, power, transformer specitication number, insulating class	Standard	Prüfzeichen von Test mark from (VDE, BSI, UL etc.)
Insulation tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	Type: CT, PZ; 130°C	UL 510	UL
Teflon tube	CHANGYUAN ELECTRONICS (SHENZHEN) CO LTD	Type: CB-TT-T;300V,VW-1, 200°C Type: CB-TT-S ,600V,VW-1, 200°C	UL 224	UL
Varnish	HITACHI CHEMICAL CO LTD	Type: WP-2952F-2G; 130°C	UL 1446	UL
Magnet wire (for sec. winding of T1)	SHEN ZHEN CITY CHENGWEI INDUSTRY CO LTD	Type: 2UEW; 130°C, Class B	UL 1446	UL
	ZHEJIANG GUANGTONG COPPER INDUSTRY CO LTD	Type: QZY-X/130, 130°C; Class B Type: QZY-X/155, 155°C; Class B	UL 1446	UL
Connector for K691B-Driver-2, 97903-52-R	SHENZHEN LYCN ELECTRONICS CO.,LTD	Type: 2.54X3.0 IC holder 1*3P Rated Current: 3AMP Contact Resistance: Max 10mΩ Dielectric Strength: min 1000v RMS Insulation Material: Black glass filled Polyester PPS-GF30-FR conforming with UL94V-0 Sleeve: Brass (H59-3) Forces: Insertion: 2N Withdrawal: 1N	-	Tested with appliance
Connector for 98005-52-R	SHENZHEN BOGUANGTONG ELECTRONICS CO.,LTD	Type: B5521-YVBN-205-M05 Rated Current: 3AMP Contact Resistance: ≤ 3mΩ Dielectric Strength: AC500 V /min Insulation Material: PBT+15%GF Sleeve: Anode: C5191 Brass Cathode：H65 Brass		Tested with appliance

To: Shenzhen Eastfield Lighting Co., Ltd.

West of 2/4F and 3/5F in No. A Building, and 3/4/5F in No. F Building, Xinhui Industrial Zone, No. 3 Tangtou Industrial Area, Shiyan street, Baoan, Shenzhen, Guangdong Province, China

Attn.: **Ms. Ivy Chen**
Fax: 0755-25734252

Date: 2012-06-20
Your ref.: N/A
Our ref.: 64.140.11.01942.011
Page(s): 1

Confirmation for Use of Alternate Components

Product	:	Internal lights (LED RIBBON KIT)
Model	:	K691B-kit-wh, 615206-52-R, K691B-kit-bl, 615209-52-R, K691B-kit-red, 615207-52-R, K691B-kit-gr, 615208-52-R, K691B-kit-cw-3m, 615210-52-R, K691B-kit-rgb, 615302-52-R
License No.	:	N8.11.09.77243.011

Hereby we would like to confirm the use of following alternate components for above mentioned appliance:

Component	Manufacturer	Model	Technical Data	Certificate Body & Certificate Number
Plug	Shenzhen Kessel Electronic Technology Co., Ltd.	KE402	250VAC, 2.5A	VDE 40020465
Flexible cable	Shenzhen Kessel Electronic Technology Co., Ltd.	H03VVH2-F	2x0.75mm^2	VDE 40033097
	Zhong Shan Yong Rui Electric Wire Co. Ltd.	H03VVH2-F	2x0.75mm^2	VDE 40021527
	Shenzhen Baohing Electric Wire & Cable Manufacture Co., Ltd.	H03VVH2-F	2x0.75mm^2	VDE 103727
Appliance couplers	Shenzhen Kessel Electronic Technology Co., Ltd.	KE402B	250VAC, 2.5A	VDE 40028808

Please attach this letter to the respective license.
If you have further questions, please feel free to contact us.

Yours sincerely,

Peter Hu
Engineer
Jiangsu TÜV-SÜD Product Service Guangzhou Branch

Jerry Yang
Project Manager